



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,289	11/13/2003	Samuel H. Russ	A-8753	9338

5642 7590 09/04/2007
SCIENTIFIC-ATLANTA, INC.
INTELLECTUAL PROPERTY DEPARTMENT
5030 SUGARLOAF PARKWAY
LAWRENCEVILLE, GA 30044

EXAMINER

SCHNURR, JOHN R

ART UNIT	PAPER NUMBER
----------	--------------

2623

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/04/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

Office Action Summary

Application No.

10/712,289

Applicant(s)

RUSS ET AL.

Examiner

John R. Schnurr

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/29/2004, 11/13/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to Application No. 10/712,289 filed 11/13/2003.

Claims 1-15 are pending and have been examined.

2. The information disclosure statements (IDS) submitted on 07/29/2004, 11/13/2003 and 11/13/2003 were considered by the examiner.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "350" has been used to designate both a remote communications device and an upconverter. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2623

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **1 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Schupak (US Patent 6,069,621) in view of Calderone (US Patent 6,588,017).

Consider **claim 1**, Schupak clearly teaches a local network system, **(Fig. 5)** comprising:

a satellite receiving device for receiving satellite signals from at least one transponder; **(Fig. 2: The system 12 receives satellite signals at terminal 1, column 3 lines 9-17.)**

a primary DHCT for receiving the satellite signals from the satellite receiving device, **(Fig. 1: Computer 2 receives the satellite signals, column 2 lines 61-64.)** and for selectively storing presentations included in the satellite signals, **(Fig. 2: Mass storage unit 19 stores the signals, column 3 lines 30-32.)** the primary DHCT comprising:

a storage device for storing the at least one presentation; **(Fig. 2 Mass storage unit 19)**

a plurality of remote devices coupled to the primary DHCT, **(Fig. 5 Television receivers 45a-45c)** each remote device for receiving the satellite signals and for receiving the modulated signals from the primary DHCT. **(column 4 lines 48-60)**

However, Schupak does not explicitly teach the primary DHCT comprising a modulator for modulating to a predetermined frequency, and for providing the modulated signals.

In an analogous art Calderone, which discloses a system for providing digital video using master and slave set-top boxes, clearly teaches a modulator for modulating to a predetermined frequency, and for providing the modulated signals. **(Fig. 1: RF modem 132 modulates the bit stream being sent to the slave device, column 5 lines 51-57.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schupak by modulating the stored presentation to a predetermined frequency before transferring it to the remote device, as taught by Calderone, for the benefit of preventing interference with other signals (column 5 line 64 to column 6 line 3 Calderone).

Consider **claim 12**, Schupak combined with Calderone, as in claim 1, clearly teaches the plurality of remote devices communicates with the primary DHCT by transmitting at least one reverse command signal. (**column 4 lines 61-67 Schupak**)

6. Claims **2-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schupak (US Patent 6,069,621)** in view of **Calderone (US Patent 6,588,017)** as applied to claim 1 above, and further in view of **Gurantz et al. (US Patent 7,130,576)**, herein Gurantz.

Consider **claim 2**, Schupak combined with Calderone, as in claim 1, clearly teaches modulating the stored presentation before transfer to the remote device.

However, Schupak combined with Calderone, as in claim 1, does not explicitly teach the modulator is a QPSK modulator.

In an analogous art Gurantz, which discloses a system for distributing satellite signals to multiple set-top devices, clearly teaches the dominant modulation type in satellite systems is QPSK. (**column 11 lines 54-55**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schupak combined with Calderone, as in claim 1, by modulating the stored presentation using QPSK, as taught by Gurantz, because the use of QPSK modulation would have yielded predictable results.

Consider **claim 3**, Schupak combined with Calderone, as in claim 1, clearly teaches a switch receiving the satellite signals. (**Fig. 2 Switch 18 Schupak**) Schupak combined with Calderone, as in claim 1, further teach modulating the stored presentation so as to be distinguishable from the digital programming signals. (**column 5 line 64 to column 6 line 3 Calderone**)

However, Schupak combined with Calderone, as in claim 1, does not explicitly teach the switch having first and second polarizations.

In an analogous art Gurantz, which discloses a system for distributing satellite signals to multiple set-top devices, clearly teaches a switch for providing a first or second polarization. (**column 1 lines 44-54**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schupak combined with

Calderone, as in claim 1, by utilizing a switch having first and second polarizations, as taught by Gurantz, for the benefit of receiving all of the data transmitted by the satellite.

Consider **claim 4**, Schupak combined with Calderone and Gurantz, as in claim 3, clearly teaches the modulator assigns the third polarization to the at least one stored presentation. **(column 5 line 64 to column 6 line 3 Calderone)**

Consider **claim 5**, Schupak combined with Calderone and Gurantz, as in claim 3, clearly teaches a switch for receiving the satellite signals from the satellite receiving device, **(Fig. 2 Switch 18 Schupak)** the satellite signals having a polarization, **(column 1 lines 44-54 Gurantz)** and for providing the satellite signals to at least one of the primary DHCT and the plurality of remote devices, **(Fig. 1: Computer 2 receives the satellite signals, column 2 lines 61-64.)** and for receiving the modulated signals from the primary DHCT **(Fig. 1: RF modem 132 modulates the bit stream being sent to the slave device, column 5 lines 51-57, Calderone.)** and for providing the modulated signals to the plurality of remote devices. **(column 4 lines 48-60 Schupak)**

Consider **claim 6**, see claim 4.

Consider **claim 11**, Schupak combined with Calderone and Gurantz, as in claim 3, clearly teaches the switching function residing in the primary DHCT. **(Fig. 2 Schupak)**

Consider **claim 7**, Schupak combined with Calderone, as in claim 1, clearly teaches the modulated signals are transmitted in the predetermined frequency that is excluded from the plurality of downstream frequency ranges. **(column 5 line 64 to column 6 line 3 Calderone)**

However, Schupak combined with Calderone, as in claim 1, does not explicitly teach the satellite signals are transmitted in a plurality of downstream frequency ranges.

In an analogous art Gurantz, which discloses a system for distributing satellite signals to multiple set-top devices, clearly teaches the satellite signals are transmitted in a plurality of downstream frequency ranges. **(column 1 lines 49-54)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schupak combined with Calderone, as in claim 1, by transmitting the satellite signals in a plurality of downstream frequency ranges, as taught by Gurantz, for the benefit of providing multiple channels.

Consider **claim 8**, Schupak combined with Calderone, as in claim 1, clearly teaches a switch for receiving the satellite and the modulated signals, (**Fig. 2 Switch 18 Schupak**) and wherein the modulated signals are transmitted in the predetermined frequency (**the modulated signals maybe several hundred MHz, column 5 line 64 to column 6 line 3 Calderone**) wherein one of the satellite signals and the modulated signals are selected by a switching function. (**Fig. 2 Switch 18 Schupak**)

However, Schupak combined with Calderone, as in claim 1, does not explicitly teach the satellite signals are transmitted in a plurality of downstream frequency ranges and the modulated signals are transmitted in the downstream frequency range.

In an analogous art Gurantz, which discloses a system for distributing satellite signals to multiple set-top devices, clearly teaches the satellite signals are transmitted in a plurality of downstream frequency ranges. (**column 1 lines 49-54**)

Gurantz further teaches the modulated signals are transmitted in the downstream frequency range. (**The downstream frequencies are 950-1450 MHz, column 1 lines 33-37 Gurantz**)

See claim 7 for motivation.

Consider **claim 9**, Schupak combined with Calderone and Gurantz, as in claim 8, clearly teaches the switching function resides in a separate external unit. (**Fig. 1 Multi port switch 160 Gurantz**)

Consider **claim 10**, Schupak combined with Calderone and Gurantz, as in claim 8, clearly teaches external unit is incorporated in an LNB. (**Fig. 1 Satellite outdoor unit 110 Gurantz**)

7. Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Schupak (US Patent 6,069,621) in view of Gurantz et al. (US Patent 7,130,576).

Consider **claim 13**, Schupak clearly teaches a satellite communication system, comprising:

a satellite receiver for receiving and processing the downstream satellite signals; (**Fig. 2: The system 12 receives satellite signals at terminal 1, column 3 lines 9-17.**)

a switch for receiving the processed satellite signals . **(Fig. 2 Switch 18)**

a primary DHCT coupled to the switch for receiving the processed satellite signals, **(Fig. 1: Computer 2 receives the satellite signals, column 2 lines 61-64.)** and for storing and subsequently transmitting desired satellite signals; **(column 4 lines 48-60)**

at least one remote device coupled to the switch, **(Fig. 5 Television receivers 45a-45c)** the at least one remote device in communication with the primary DHCT, the at least one remote device for receiving the processed satellite signals, and for receiving the stored desired satellite signals from the primary DHCT via the switch. **(column 4 lines 48-60)**

However, Schupak does not explicitly teach providing the processed satellite signals according to a frequency and a polarization.

In an analogous art Gurantz, which discloses a system for distributing satellite signals to multiple set-top devices, clearly teaches providing the processed satellite signals according to a frequency and a polarization. **(column 1 lines 44-54)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schupak combined with Calderone, as in claim 1, by utilizing a switch having first and second polarizations, as taught by Gurantz, for the benefit of receiving all of the data transmitted by the satellite.

8. Claims **14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schupak (US Patent 6,069,621)** in view of **Gurantz et al. (US Patent 7,130,576)** as applied to claim 13 above, and further in view of **Calderone (US Patent 6,588,017)**.

Consider **claim 14**, Schupak combined with Gurantz, as in claim 13, clearly teaches providing the processed satellite signals according to a frequency and a polarization. **(column 1 lines 44-54)**

However, Schupak combined with Gurantz, as in claim 13, does not explicitly teach the primary DHCT comprising a modulator for modulating to a predetermined frequency, and for providing the modulated signals.

Art Unit: 2623

In an analogous art Calderone, which discloses a system for providing digital video using master and slave set-top boxes, clearly teaches a modulator for modulating to a predetermined frequency, and for providing the modulated signals. **(Fig. 1: RF modem 132 modulates the bit stream being sent to the slave device, column 5 lines 51-57.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schupak combined with Gurantz, as in claim 13, by modulating the stored presentation to a predetermined frequency before transferring it to the remote device, as taught by Calderone, for the benefit of preventing interference with other signals (column 5 line 64 to column 6 line 3 Calderone).

Consider **claim 15**, Schupak combined with Gurantz and Calderone, as in claim 14, clearly teaches the predetermined frequency having a polarization is excluded from the plurality of frequencies having a polarization of the downstream satellite signals. **(column 5 line 64 to column 6 line 3 Calderone)**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Schnurr whose telephone number is (571) 270-1458. The examiner can normally be reached on Monday - Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRS



CHRISTOPHER GRANT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600